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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,929	10/10/2001	Dai Inoue	JCLA7503	1135

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J C PATENTS, INC.
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EXAMINER

HALPERN, MARK

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/974,929

Applicant(s)

INOUE ET AL.

Examiner

Mark Halpern

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1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 10, 12-14, 16, 18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10, 12-14, 16, 18, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1) Acknowledgement is made of Amendment received 3/3/2005.

Claim 1 is amended. Claims 1-5, 10, 12-14, 16, 18, 20-22, are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2) Claims 1-2, 4, 18, 20, are rejected under 35 U.S.C. 102(e) as being anticipated by Wada (6,619,074).

Claim 1: Wada discloses an apparatus for manufacturing a soot perform for an optical fiber by depositing glass particles generated through a flame hydrolysis reaction of raw material gases onto a starting rod being rotated and pulled up (col. 1, lines 8-16 and lines 29-39 and col. 2, lines 4-7). The apparatus includes the following components: a reaction chamber (Fig. 2A, element 11) where the glass particles (Fig 2a, element 5) are deposited over the starting rod (Fig 2A, element 4) to form a soot perform; an upper room (col. 5, lines 49-51) on top of the reaction chamber to house the soot perform being pulled up; at least one core deposition burner (Fig. 2A, element 2)

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disposed to open in the reaction chamber; a horizontally extending slit (Fig. 2A, element 10) made only in an upper portion of a sidewall of the reaction chamber which is closest to the core deposition burner at a location slightly underneath a ceiling of the reaction chamber where the slit is adapted to pass gas into the upper part of the reaction chamber; and a gas exit (Fig. 2A, element 13) made in the wall of the reaction chamber opposed to the wall having the slit. Slit 10 is equipped with baffle plates 8 to adjust the flow of gas into the chamber; the baffles are adjusting the size of the opening of the slit.

Claim 2: burner 2 is a cladding deposition burner (col. 1, lines 26-35).

Claim 4: the gas exit is substantially horizontal and the distance of the top exit and the ceiling is less than the claimed distance as shown in Fig. 2A.

Claim 18: a core heating burner is installed at the lower reaction chamber.

Fig. 2A.

Claim 20: the gas exit is in wall of the upper part of the chamber. Fig. 2A.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3) Claims 3, 5, 10, 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada.

Claims 3, 5: Wada discloses the slit opening. It would have been obvious to one skilled in the art at the time the invention was made that the slit opening be at least 75 percent of the width of the chamber since the slit opening 10 is equipped with baffles that have the capability of horizontal expansion as shown in Fig. 4.

Claim 10: Wada is applied as above for claim 1, Wada fails to disclose that the upper room above chamber is substantially cylindrical. It would have been obvious, to one skilled in the art at the time the invention was made, that the upper room above chamber opening of Wada, be substantially cylindrical, since the preform and the rotating shaft are circular and a cylindrical configuration of the upper room and space around the preform would enhance the gas flow and provide even thermal distribution around the preform.

Claim 21: the slit opening is adjustable therefore it would have been obvious that the slit opening could be adjusted to the claimed dimensions.

4) Claims 12-14, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada in view of Kudu (JP 09-118537, translated copy).

Claim 12: Wada is applied as above for claim 1, Wada fails to disclose that the floor of the reaction chamber is formed with raised floor having floor higher than the core deposition position and located at the foot of the wall of the chamber which has the gas exit. Kudu discloses a process for drawing optical fiber in an apparatus that includes chamber 20 and lower chamber 10, thus having the floor raised relative to the core deposition position (Kudu, Abstract and Figure 1). It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of

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Wada and Kudu, because such a combination would permit different operations (such as clad deposition and core heating) take place in separate rooms subject to independent control conditions in the apparatus of Wada as disclosed by Kudu (Kudu, Abstract, and pg. 2, lines 1-20).

Claim 13: horizontal partition 30 separates chamber 20 and lower chamber 10 (Kudu, Figure 1). The core deposition extends to chamber 10 through opening in said partition. The dampers 14 and 24 of exhaust ports 12 and 22, are independently controlled by computers 17 and 27. It would have been obvious, to one skilled in the art at the time the invention was made, that damper 14 be made permanently closes thus the lower chamber would have no exhaust capability (Kudu, pg. 2, lines 4-15, Figure 1).

Claim 14: it would have been obvious, to one skilled in the art at the time the invention was made, that the horizontal partition 30 that separates chamber 20 and lower chamber 10 be of circular shape, and it would have been obvious that the radius of the opening be greater than the radius of the soot preform of claimed difference, since the preform is of cylindrical shape and thus it would enhance the gas flow and provide even thermal distribution around the preform.

Claim 16: a burner is installed in the upper reaction chamber 20 and a burner is installed in the lower chamber 10 of Kudu (Figure 1).

Allowable Subject Matter

5) Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for indicating allowable subject matter is that the cited prior art does not disclose an apparatus having gas exit of dimensions claimed (claim 22).

Response to Amendment

6) Claims 1-5, 10, 12-14, 16, 18, 20-22, objection is withdrawn in view of amended claim.

7) Claims 1, 2, 20, rejection under 35 U.S.C. 102(b) as being anticipated by Koaizawa (JP 11-343135, translated), is withdrawn in view of amended claim and further search of art in prior art.

8) Claims 3-5, 10, rejection under 35 U.S.C. 103(a) as being unpatentable over Koaizawa, is withdrawn in view of amended claim and further search of art in prior art.

9) Claims 12-14, 16, rejection under 35 U.S.C. 103(a) as being unpatentable over Koaizawa in view of Kudu (JP 09-118537, translated), is withdrawn in view of amended claim and further search of art in prior art.

10) Claims 18, 21, allowability is withdrawn in view of further search of art in prior art.

11) Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mark Halpern
Primary Examiner
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